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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|------------------------------------------------------------------------------|-------------|--------------------------------|---------------------|------------------|
| 10/808,243 | 03/25/2004 | Kazushige Noguchi | FUJI 141 | 5025 |
| 7590 07/28/2006 | | | | |
| RABIN & BERDO, P.C. Suite 500 1101 14th Street Washington, DC 20005 | | EXAMINER HUNNINGS, TRAVIS R | | |
| | | ART UNIT 2612 PAPER NUMBER | | |

DATE MAILED: 07/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/808,243

Applicant(s)

NOGUCHI, KAZUSHIGE

Examiner

Travis R. Hunnings

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24, 26 and 27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 12-24, 26 and 27 is/are rejected.
- 7) ☒ Claim(s) 2-11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1, 23, 24 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Slemmer et al. (Slemmer; US Patent Publication 2004/0252034) in view of Witte (US Patent 6,862,443).

Regarding claim 1, Slemmer discloses *Automated Parking Director Systems And Related Methods* that has the following claimed limitations:

The claimed server for managing parking information about a parking lot having a plurality of parking spaces is met by the processor controlling the information regarding the parking spaces (paragraph 33);

The claimed plurality of wireless LAN base stations installed in the parking lot for wirelessly transmitting and receiving the parking information, each of the plurality of wireless LAN base stations having a transmittable and receiving, the plurality of wireless LAN base stations forming a wireless LAN system such that each of the plurality of wireless LAN base stations can wirelessly connect to a wireless LAN mobile station of a mobile object when the mobile object exists in its own transmittable and receivable area is met by the multiple processors, each communicating with mobile personal

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communication devices using any form of communication mechanism for allowing a plurality of data processing systems with respective output displays to communicate (paragraphs 33-36);

The claimed centralized server for managing the parking information that has communication means for communicating the parking information between the plurality of wireless LAN base stations and the server via an IP network operating with internet protocol and wherein the wireless LAN mobile station and the server can communicate the parking information through the wireless LAN system and the communication means is met by the processor receiving and storing information regarding parking lot information from a plurality of object (parking space) detectors over a wired or wireless communication link and also providing that parking information back to wireless communication devices, such as those in vehicles as shown in figure 2, using any form of communication mechanism for allowing a plurality of data processing systems with respective output displays to communicate which would include an IP network (paragraph 33-36).

Slemmer does not specifically disclose the claimed wireless mobile LAN station of the mobile object having unique identifying information, and accepting or rejecting an incoming wireless signal depending on whether identification information in the incoming wireless signal matches the unique identifying information. Witte discloses *Remote Communication System For Use With A Vehicle* that teaches using unique identification for wireless communication devices so that a communication link can be established only when the identification matches (column 5, lines 7-25). Including a

identification protocol in the device of Slemmer would increase the security of the device and allow for only authorized communication signals to get through and therefore it would reduce the noise the system received. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Slemmer according to the teachings of Witte to have unique identification information and reject/accept signals based on that identification information.

Regarding claim 23, the claimed mobile object being a portable communication device is met by the device being a smartphone (paragraph 34).

Regarding claim 24, the claimed communication device being a telephone is met by the device being a smartphone (paragraph 34).

Regarding claim 27, the claimed incoming wireless signal supplying information from the server about available parking spaces that are near the mobile object is met by the transmitters of Kirkpatrick sending out signals to the receivers with information regarding the availability of parking spaces in the lot (column 6, lines 46-62 and column 7, lines 10-33).

3. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Slemmer in view of Witte and further in view of Clapper (US Patent 6,147,624).

Regarding claim 12, Slemmer and Witte disclose all of the claimed limitations except for the claimed server including vehicle position registration means for identifying and registering a vehicle position signal, which shows a vehicle position, in connection with the wireless LAN mobile station, the mobile object generating the vehicle position signal and supplying the vehicle position signal to the wireless LAN mobile station, and the vehicle position signal is supplied from the wireless LAN mobile station to the server through the wireless LAN system and the communication means. Clapper teaches a GPS device located in the vehicle for transmitting the current vehicle position to the central server so that the server can calculate the needed route to reach the closest unoccupied parking space as shown in figures 3 and 4 (column 2, lines 56-67). Adding a GPS device to the mobile device and transmitting the car's location to the central server so the server can calculate a desired route would make the device easier to use and more functional by showing the operator exactly where to go to find the nearest open space. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Slemmer and Witte according to the teachings of Clapper to include a position detecting device and providing the server with the vehicle position through the communication link.

4. Claims 13-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Slemmer in view of Witte further in view of Clapper and further in view of Johnson et al. (Johnson; US Patent 6,694,258).

Regarding claim 13, Slemmer, Witte and Clapper disclose all of the claimed limitations except for the claimed server including vehicle position information generating means for extracting the registered vehicle position and for generating a vehicle position information signal which indicates the vehicle position and the vehicle position information signal being supplied from the server to the wireless LAN mobile station through the wireless LAN system and the communication means. Johnson discloses *Hand Held Car Locator* that teaches a mobile device that stores the location of a parked vehicle in a parking lot with a centralized server and retrieving that information using the mobile device to locate the parked vehicle (column 2, lines 51-65). Modifying the system of Slemmer, Witte and Clapper to include a mobile device that can retrieve the location of the vehicle stored at the central server would help guide the user back to their vehicle. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Slemmer, Witte and Clapper according to the teachings of Johnson to include a device which stores the position of the vehicle at the central server and a mobile device that can request the location information from the server upon command.

Regarding claim 14, the claim is interpreted and rejected as claim 13 stated above.

Regarding claim 15, the claimed parking condition information signal including a voice signal which indicates a non-occupied parking space by voice is met by the parking information being provided using an automated voice (paragraph 11).

Regarding claim 16, the claim is interpreted and rejected as claim 8 stated above. The claimed 'software' used to produce the voice in response to the signal would have been obvious to one of ordinary skill in the art to implement in vehicle systems using a computer system.

Regarding claim 17, the claimed parking condition information signal includes an image signal which displays a map near the wireless LAN mobile station and indicates a non-occupied parking space in the displayed map is met by the information being displayed in a graphic format proximate a parking lot entry site (paragraph 41).

Regarding claim 18, the claim is interpreted and rejected as claim 10 stated above. The claimed 'software' used to produce the voice in response to the signal would have been obvious to one of ordinary skill in the art to implement in vehicle systems using a computer system.

5. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Slemmer in view of Witte further in view of Clapper further in view of Johnson and further in view of Li.

Regarding claim 19, Slemmer, Witte, Clapper and Johnson disclose all of the claimed limitations except for the claimed plurality of parking spaces respectively having lighting systems to indicate the vehicle position, the vehicle position information signal includes a lighting control signal to indicate the vehicle position by activating one of the plurality of lighting systems, the wireless LAN system being configured such that the plurality of wireless LAN base stations are wirelessly connected to the plurality of lighting systems within the respective transmittable and receivable areas, the lighting control signal being supplied from the server to the one of the plurality of lighting systems through the wireless LAN system and the communication means and the one of the plurality of lighting systems are activated in response to the lighting control signal. Li teaches guiding lights located on the floor of the parking lot or garage that guide drivers to unoccupied spots in the garage (column 3, lines 38-48). It would have been obvious to one of ordinary skill in the art to include the lighting systems of Li and modify the system to both guide a vehicle to an unoccupied space and to guide a operator back to the parked vehicle upon the operator requesting the vehicle location from the central server as taught by Johnson (see rejection to claim 13 above) in order to more easily guide the operator back to their vehicle. The claimed 'wireless' controlling of the lighting systems would have been obvious to one of ordinary skill in the art to use either a wired or wireless controlling system. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Slemmer,

Witte, Clapper and Johnson according to the teachings of Li to include lighting systems to guide the user to open spots and back to their vehicles.

6. Claims 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Slemmer in view of Witte and further in view of Haynes et al. (Haynes; US Patent 6,816,085).

Regarding claim 20, Slemmer and Witte disclose all of the claimed limitations except for the claimed additional wireless LAN base stations being provided at an entrance and an exit of the parking lot being wirelessly connected to the mobile object to detect entrance and exit of the wireless LAN mobile station into and from the parking lot, providing the server an entrance and exit signal and storing the entrance and exit time at the server. Haynes discloses *Method For Managing A Parking Lot* that teaches placing parking interaction devices at the entrance and exit of a parking lot that registers the entrance and exit of a vehicle for charging the vehicle a fee based on the length of time spent in the parking lot (column 5, lines 16-35). Adding transmitters to the entrance and exit of the parking lot system of Slemmer and Witte while also providing the server with means to register and store the entrance and exit time of vehicles would allow the owner of the lot to easily compute and receive the fee for parking lots that charge to park. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Slemmer and Witte according to the teachings of Haynes to include transmitters at the entrance and exit of the parking lot

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that are capable of registering the enter and exit times of a vehicle in order to charge the vehicle a fee to park.

Regarding claim 21, Slemmer and Witte and Haynes disclose all of the claimed limitations except for the claimed requesting signal requesting a presentation of a parking time and/or a parking fee. Examiner takes official notice that it is well known in the art for toll systems to display time and/or parking fee information on a display board located at the exit of parking lots when a vehicle is exiting the lot in order to allow the user to double-check the amount that was charged.

Regarding claim 22, the claimed wireless LAN base station being provided at a store which ties up with the parking lot so that the parking information can be communicated at the store is met by the parking system being used at many different places including public events, airports, stadiums, commuter lots, office buildings or other large parking areas (paragraph 2).

7. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Slemmer in view of Witte and further in view of Nelson et al. (Nelson; US Patent Application Publication 2004/0212519).

Regarding claim 26, Slemmer and Witte disclose all of the claimed limitations except for the claimed communication device is carried by a driver of the vehicle and

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the server stores position information about the vehicle when the vehicle is parked based on the identification information. Nelson discloses *Method And Apparatus For Obtaining Data Regarding A Parking Location* that teaches storing information regarding parking lots including users, user devices, parking locations, etc (paragraph 85). Storing additional information in the central server of Slemmer and Witte would provide the user with more valuable information regarding the parking lot. It would have been obvious to store the parking location of a user device in the central server for retrieval at a later time therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Slemmer and Witte according to the teachings of Nelson to modify the device to store information regarding the parking location of a vehicle according to the vehicle communication device identification information.

Claim Objections

8. Claim 26 is objected to because of the following informalities: the claim is written to depend on canceled claim 25. The claim will be judged on merit as if it were dependent on independent claim 1. Appropriate correction is required.

Allowable Subject Matter

9. Claims 2-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

10. Applicant's arguments filed 7 June 2006 have been fully considered but they are not persuasive. Applicant argues the following:

Argument A: Applicant argues that Kirkpatrick and Slemmer do not teach nor disclose the claimed mobile object having unique identifying information and only accepts incoming signals that include that unique identifying information.

Argument B: Applicant argues that Kirkpatrick and Slemmer do not teach nor disclose the claimed sensor for reading particular identification information located at each parking space.

Responses:

Regarding argument A, the argument is moot in light of the new grounds of rejection stated above.

Regarding argument B, the argument is moot in light of the claims being indicated as allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

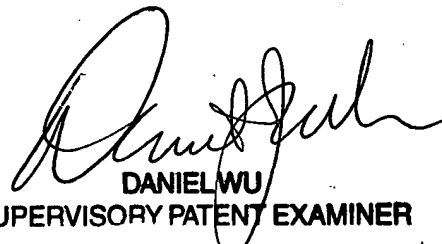
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Travis R. Hunnings whose telephone number is (571) 272-3118. The examiner can normally be reached on 8:00 am - 5:00 pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J. Wu can be reached on (571) 272-2964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TRH


DANIEL WU
SUPERVISORY PATENT EXAMINER
7/24/06